CLAIMS

- A bone grafting material comprising a porous carrier of ceramic or glass ceramic or glass material and at least one pyrrolidone arranged to the carrier.
- 2. The bone grafting material of according to claim 1, wherein the pyrrolidone is bound to the carrier by a chemical bond.
- 3. The bone grafting material of claim 1, wherein the pyrrolidone is selected from pyrrolidones, optionally substituted with alkyl or cycloalkyl groups, and polypyrrolidones.
- 4. The bone grafting material of claim 3, wherein the pyrrolidone is selected from 1-methyl-2-pyrrolidone (NMP), 1-ethyl-2-pyrrolidone (NEP), 2-pyrrolidone (PB), and 1-cyclohexyl-2-pyrrolidone (CP).
- 5. The bone grafting material of claim 4, wherein the pyrrolidone is 1-methyl-2-pyrrolidone (NMP).
- 6. The bone grafting material of claim 1, wherein the amount of pyrrolidone is between about 0.1 and about 50 weight-% of the total weight of the pyrrolidone loaded porous carrier.
- 7. The bone grafting material of claim 1, further comprising at least one bioactive agent.
- 8. The bone grafting material of claim 7, wherein the bioactive agent is selected from the group consisting of anti-inflammatory agents, antibacterial agents, antiparasitic agents, antifungal agents, antiviral agents, anti-neoplastic agents, analgesic agents, anaesthetics, vaccines, central nervous system agents, growth factors, hormones, antihistamines, osteoinductive agents, cardiovascular agents, anti-ulcer agents, bronchodilators, vasodilators, birth control agents, fertility enhancing agents and polypeptides.
- 9. The bone grafting material of claim 8, wherein the bioactive agent is at least one bone morphogenetic protein (BMP).
- 10. The bone grafting material of claim 1, wherein the carrier is selected from the group consisting of calcium phosphates, hydroxy apatites, silica gels, anorganic mineral bone matrixes, xerogels and sol-gel glasses.
- 11. The bone grafting material of claim 1, wherein the carrier comprises a ceramic/polymer composite.
- 12. The bone grafting material of claim 11, wherein the polymer is selected from the group consisting of polysulphones, polyaryletherketones,

polyolefins and biodegradable polymers.

- 13. The bone grafting material, comprising a porous carrier of calcium phosphate and 1-methyl-2-pyrrolidone (NMP) arranged in said calcium phosphate.
- 14. The bone grafting material comprising a porous carrier of calcium phosphate, 1-methyl-2-pyrrolidone (NMP) arranged in said calcium phosphate and at least one bone morphogenetic protein (BMP).
- 15. The method of producing a bone grafting material, the method comprising step of

preparing a porous carrier of ceramic or glass ceramic or glass, and adding at least one pyrrolidone to the porous carrier.

- 16. The method of claim 15, wherein the pyrrolidone is selected from pyrrolidones, optionally substituted with alkyl or cycloalkyl groups, and polypyrrolidones.
- 17. The method of claim 16, wherein the pyrrolidone is selected from 1-methyl-2-pyrrolidone (NMP), 1-ethyl-2-pyrrolidone (NEP), 2-pyrrolidone (PB), and 1-cyclohexyl-2-pyrrolidone (CP).
- 18. The method of claim 17, wherein the pyrrolidone is 1-methyl-2-pyrrolidone (NMP).
- 19. The method of claim 15, wherein the pyrrolidone is added in a liquid form to the carrier.
- 20. The method of claim 15, wherein the pyrrolidone is added in a vaporized form to the carrier.
- 21. The implant, comprising a carrier of porous ceramic or glass ceramic or glass material, and at least one pyrrolidone arranged in the carrier.
- 22. The implant of claim 21, wherein the pyrrolidone is selected from pyrrolidones, optionally substituted with alkyl or cycloalkyl groups, and polypyrrolidones.
- 23. The implant of claim 22, wherein the pyrrolidone is selected from 1-methyl-2-pyrrolidone (NMP), 1-ethyl-2-pyrrolidone (NEP), 2-pyrrolidone (PB), and 1-cyclohexyl-2-pyrrolidone (CP).
- 24. The implant of claim 21, wherein the amount of pyrrolidone is between about 0.1 and about 50 weight-% of the total weight of the pyrrolidone loaded porous carrier.
- 25. The implant of claim 21, further comprising at least one bioactive agent.

- 26. The implant of claim 25, wherein the bioactive agent is selected from the group consisting of anti-inflammatory agents, antibacterial agents, antiparasitic agents, antifungal agents, antiviral agents, anti-neoplastic agents, analgesic agents, anaesthetics, vaccines, central nervous system agents, growth factors, hormones, antihistamines, osteoinductive agents, cardiovascular agents, anti-ulcer agents, bronchodilators, vasodilators, birth control agents, fertility enhancing agents and polypeptides.
- 27. The implant of claim 26, wherein the bioactive agent is at least one bone morphogenetic protein (BMP).
- 28. The implant of claim 21, wherein the implant comprises a scaffold on whose surface the carrier is arranged.
- 29. The implant of claim 28, wherein the scaffold is made of ceramic or glass ceramic or glass material.
 - 30. The implant of claim 28, wherein the scaffold is made of metal.
- 31. The implant according to claim 28, wherein the scaffold is made of polymer material.
 - 32. The implant of claim 28, wherein the scaffold is porous.
- 33. The implant of claim 21, wherein the carrier is selected from the group consisting of calcium phosphates, hydroxy apatites, silica gels, anorganic mineral bone matrixes, xerogels and sol-gel glasses.
- 34. The implant of claim 21, wherein the carrier comprises a ceramic/polymer composite.
- 35. The implant of claim 34, wherein the polymer is selected from the group consisting of polysulphones, polyaryletherketones, polyolefins and biodegradable polymers.